



## SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:  
EP 18 74 44 48

**Classification of the application (IPC):**  
H02S 30/20, H01L 31/042, H02S 40/36

**Technical fields searched (IPC):**  
H01L, H02S

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
A,D	JP 2007032171 A (KAWAKAMI SANGYO CO LTD) 08 February 2007 (2007-02-08) * paragraphs [0006] - [0009] * * figures 1,2 *	1-10
A	JP 2001332752 A (CANON KK) 30 November 2001 (2001-11-30) * paragraphs [0072] - [0080] * * figures 9-11 *	1-10
A	JP 2004090817 A (ISHIKAWAJIMA HARIMA HEAVY IND) 25 March 2004 (2004-03-25) * paragraphs [0008] - [0020] * * figures 1,2 *	1-10
A	US 2015083191 A1 (GMUNDNER GERNOT [AT]) 26 March 2015 (2015-03-26) * paragraphs [0023] - [0033] * * figures 1-3 *	1-10
A	JP S60147150 A (NIPPON ELECTRIC CO) 03 August 1985 (1985-08-03) * page 241, left-hand column, paragraph 1 - page 242, right-hand column, paragraph 4 * * figures 1-3 *	1-10

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search Berlin	Date of completion of the search 03 June 2020	Examiner Ekoué, Adamah
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### CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone	P: intermediate document
Y: particularly relevant if combined with another document of the same category	T: theory or principle underlying the invention
A: technological background	E: earlier patent document, but published on, or after the filing date
O: non-written disclosure	D: document cited in the application
& : member of the same patent family, corresponding document	L: document cited for other reasons

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## ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on 03-06-2020  
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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 2007032171	A	08-02-2007	NONE	
JP 2001332752	A	30-11-2001	NONE	
JP 2004090817	A	25-03-2004	NONE	
US 2015083191	A1	26-03-2015	AT US WO	12996 U1 2015083191 A1 2012167291 A2
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